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10/564,150	01/11/2006	Hsuan-ming Shih	066733-0102	6117
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FOLEY AND LARDNER LLP			EXAMINER	
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WASHINGTON, DC 20007			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,150

Applicant(s)

SHIH, HSUAN-MING

Examiner

Steven G. Snyder

Art Unit

2184

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 01/11/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is in response to application filed on January 11, 2006 in which claims 1 to 12 are presented for examination.

Status of Claims

Claims 1 to 12 are pending, of which claim 1 is in independent form.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to because the text is illegible in **Figure 1**. Also, **Figure 2** contains an unknown character following the words "Different Driver." Finally, **Figures 3 – 5** contain an unknown character following the word "Finished." Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes

made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: there are numerous instances of unclear terms. Some examples are: page 2 line 28 that states, "some problems are lied in the method," page 1 line 17 "if finding out new device and there's *.inf file of such kind device in the direction INF of the operating system..." and paragraphs [0011], [0012], [0037], [0038], [0054], [0060], [0061], and [0065] where the word "till" is used in place of "until."

Appropriate correction is required.

Claim Objections

4. **Claim 1 – 12** are objected to because of the following informalities: claim 1 contains the word "till" in the description of step 4 and step 5 of the claim. In this claim it seems that the word till should be replaced with "until." Appropriate correction is required. Claims 2 – 12 inherit the objection of claim 1 since they depend on claim 1.

5. **Claim 2** is objected to because of the following informalities: this claim contains the phrase "the control module responds the device's type message." This does not follow correct grammar. This phrase should read "the control module responds with the device's type message." Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deng et al., U.S. Patent Application 2003/0005278 (hereinafter referred to as Deng) in view of Ushigami, Japanese Patent Application 2004-213427 A (hereinafter referred to as Ushigami).

Referring to claim 1, Deng discloses, a method for data processing device exchanging data with computer (paragraph [0010] along with Fig. 1 describes a semiconductor storage device connected to host computer system via an interface). Deng also discloses, said data processing device including standard data interface, control module and storage module (Fig. 1 shows a storage device with general-purpose interface 21, control module 22, and storage medium module 1). Deng further

discloses, the standard data interface used for the data processing device connecting with the computer (Fig. 1 shows a general purpose interface 21). Deng further discloses, the control module used for W/R controlling to storage module and exchanging data with the computer (paragraph [0010] describes a storage device realizing floppy disk, CD-ROM, or ZIP disk protocol and implementing the storing function. Also, Fig. 1 control module 22 connected to storage medium module 1 via a bidirectional connection for reading and writing). Deng also discloses, when said data processing device is connected with the computer under the running-state through the standard data interface or when the operation system of the computer connected with said data processing device starts, said computer communicating with the control module based on said standard data interface (paragraph [0010] describes a storage device capable of hot plug in/out and being removably connected to the host through the general purpose interface).

Deng also discloses, said computer sending an enquiring message of the device's type to said data processing device (paragraphs [0057] – [0058] state, the inquiry command). Deng further discloses, after receiving the enquiring message of the device's type, said control module sending a device's type information of said data processing device to the computer (paragraph [0057] states, the control module returns the configuration information of the device and sets the bit for its device class).

It is noted, however, that Deng does not specifically teach, “after said computer receiving said device's type information, if the device's type information indicating that the data processing device is the device with auto-run function, then said computer

setting the device attribute of said data processing device to the device with auto-run function, and accessing said data processing device according to the corresponding access specifications, then carrying on step 4, else carrying on step 5; step 4, if the computer finding the auto-running file stored in the data processing device, then the computer performing auto-run function according to the script in the auto- running file, else the operation on the data processing device being finished till next access operation to said data processing device; step 5, said computer setting the device attribute of said data processing device to the device without auto-run function, finishing the operation on the data processing device till next access operation to said data processing device the device responding to the host with information that characterizes the device as having an autorun function or not having an autorun function." Ushigami, however, achieves the aspect of a storage device which can turn on or off its autorun capabilities. Ushigami also discloses, in paragraph [0002], how the autorun program is stored in the device. Ushigami further describes how starting information, based on the on/off setting, is sent to the host device after it has been recognized (See Ushigami paragraphs [0011] – [0015]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of Deng's invention, as explained above, to include Ushigami's invention, wherein the device could be set to have autorun capabilities or to act as storage with no autorun capabilities. As stated by Ushigami, in paragraph [0004], this would provide a means for saving time and effort by allowing the device to be configured as desired.

As per claim 2, the majority of the limitations of this claim have been noted in the rejection of claim 1 (See detail of claim 1 rejection above). Also, Ushigami discloses a control switch is set in said data processing device for controlling the start or stop of auto-run function of said data processing device (paragraph [0028] and automatic execution control switch 15 of Drawing 1 describes how the device sends starting information to the host based on the switch). Ushigami further discloses, after receiving the enquiring message of the device's type, tile control module checks whether the state of said control switch is representing the start of auto-run function or not (paragraph [0028] states the information control part 14 will output starting information based on the setting of the automatic execution control switch). Ushigami further discloses, if "yes", then the control module responds the device's type message to the computer and informs the computer that the data processing device is the device with auto-run function, else the control module responds the device's type message to the computer and informs the computer that the data processing device is the device without auto-run function (paragraph [0025] states how the information on autorun is supplied to the host device).

Also, since this claim depends on claim 1, the motivation to combine Deng and Ushigami's inventions applies to this claim as well.

As per claim 3, the majority of the limitations of this claim have been noted in the rejection of claim 1 (See detail of claim 1 rejection above). Also, Ushigami discloses in paragraph [0028], how the device detects the position of a switch to determine if the user wishes to include autorun capabilities with the device. The detected setting of the switch is sent to the host along with other starting information.

It is noted, however, that Ushigami does not specifically teach storing control data to represent the start or stop of an auto-run function. However, it is known in the art that the status of switches can be read and stored in a register or other form of memory.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of Ushigami's invention, as explained above, wherein the state of the switch would be saved in memory. This would provide a means for the device to read its switch state in order to convey the proper information to the host.

Also, since this claim depends on claim 1, the motivation to combine Deng and Ushigami's inventions applies to this claim as well.

As per claim 4, the majority of the limitations of this claim have been noted in the rejection of claim 1 (See detail of claim 1 rejection above). Also, Ushigami discloses said auto-running concretely depicts that said computer accesses programs to be run by the script according to the script in the auto- running file and executes them in the order specified in the auto-running file (paragraph [0036] states how if a device with the

autorun capability is connected to the host computer, the host will perform the automatic execution based on the content of the autorun.inf file).

Also, since this claim depends on claim 1, the motivation to combine Deng and Ushigami's inventions applies to this claim as well.

As per claim 5, the majority of the limitations of this claim have been noted in the rejection of claim 4 (See detail of claim 4 rejection above). Also, Ushigami discloses said program is stored in the storage module of said data processing device and/or stored in the other storage devices of said computer (paragraph [0002] states that it is known in the art to use an autorun function to execute a predetermined program automatically. This program is described as being stored in the external device).

Also, since this claim depends on claim 4, the motivation to combine Deng and Ushigami's inventions, as stated in the rejection to claim 1 above, applies to this claim as well.

As per claim 6, the majority of the limitations of this claim have been noted in the rejection of claim 5 (See detail of claim 5 rejection above). Also, Deng discloses a secure storage area is set in said storage module, the secure storage area is set to the state which can not be displayed and/or modified by the computer, said auto-running file and/or said program are stored in the secure storage area (paragraphs [0015] and [0016] describe how the storage of the device can be write protected and can also store programs. Therefore, it would be obvious to have the section of memory that contains

programs to be write protected so that the host could not write over or alter these programs).

Also, since this claim depends on claim 5, the motivation to combine Deng and Ushigami's inventions, as stated in the rejection to claim 1 above, applies to this claim as well.

As per claim 7, the majority of the limitations of this claim have been noted in the rejection of claim 5 (See detail of claim 5 rejection above). Also, Deng discloses one or a plurality of data storage areas are setup in said storage module for storing configuration information and/or data to be exchanged, and storing the configuration information about the data storage areas (paragraph [0096] along with Fig. 4 shows how the storage of the device can be split into a plurality of storage spaces. One or more of the spaces may be setup as a buffer area. Deng further describes how special information areas may contain information about the storage device).

Deng further discloses said step 5 further comprises: the computer communicating with the data processing device, parsing said stored configuration information and exchanging data with computer in accordance with the configuration information (Fig. 5 shows how configuration information is used to select which protocol will be followed so that the commands of the host are understood by the device).

Also, since this claim depends on claim 5, the motivation to combine Deng and Ushigami's inventions, as stated in the rejection to claim 1 above, applies to this claim as well.

As per claim 8, the majority of the limitations of this claim have been noted in the rejection of claim 1 (See detail of claim 1 rejection above). Also, Deng discloses the standard interface of said data processing device is USB interface or IEEE1394 interface (paragraph [0004] describes how the interface channels between the device and the host are universal interface channels, such as USB and IEEE1394).

Also, since this claim depends on claim 1, the motivation to combine Deng and Ushigami's inventions applies to this claim as well.

As per claim 9, the majority of the limitations of this claim have been noted in the rejection of claim 1 (See detail of claim 1 rejection above). Also, Deng discloses a CD-ROM driver (paragraph [0010] describes how the device can simulate and implement the storing function of the CD-ROM working on the CD-ROM drive).

It is noted, however, that Deng does not specifically teach a CD driver with an auto-run function. Ushigami, however, achieves the aspect of a storage device which can turn on or off its autorun capabilities (See Ushigami paragraph [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of Deng's invention, as explained above, to include Ushigami's invention, wherein the device implements a CD driver that can have its autorun capability set to ON. As stated by Ushigami, in paragraph [0004], this would provide a means for saving time and effort by allowing the device to be configured as desired.

As per claim 10, the majority of the limitations of this claim have been noted in the rejection of claim 1 (See detail of claim 1 rejection above). Also, Deng discloses the device being a floppy disk (paragraph [0010] describes how the device can simulate and implement the floppy disk working on the floppy disk drive).

It is noted, however, that Deng does not specifically teach a floppy disk, hard disk, or flash based storage device without an auto-run function. Ushigami, however, achieves the aspect of a storage device which can turn on or off its autorun capabilities (See Ushigami paragraph [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of Deng's invention, as explained above, to include Ushigami's invention, wherein the device implements any one of a floppy disk, hard disk, or flash device that can have its autorun capability set to OFF. As stated by Ushigami, in paragraph [0004], this would provide a means for saving time and effort by allowing the device to be configured as desired.

As per claim 11, the majority of the limitations of this claim have been noted in the rejection of claim 2 (See detail of claim 2 rejection above). Also, the limitations of this claim are equivalent to the limitations of claim 4. Therefore, the rejection to claim 4 applies to this claim as well. Also, the motivation to combine Deng and Ushigami's inventions, as stated in the rejection to claim 1 above, applies to this claim as well.

As per claim 12, the majority of the limitations of this claim have been noted in the rejection of claim 3 (See detail of claim 3 rejection above). Also, the limitations of this claim are equivalent to the limitations of claim 4. Therefore, the rejection to claim 4 applies to this claim as well. Also, the motivation to combine Deng and Ushigami's inventions, as stated in the rejection to claim 1 above, applies to this claim as well.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Application 2004/0172427 discloses a CD-ROM that contains an autorun.inf file. Also a control file includes configuration information.

U.S. Patent Application 2004/0125782 discloses a USB device that contains autorun and programs in its memory as well as a switch that can activate or deactivate device functions.

U.S. Patent 5,675,831 discloses automatic installation of a modem using INF files.

U.S. Patent Application 2002/0083228 discloses plug and play devices.

U.S. Patent Application 2002/0161939 discloses reading from ROM of a newly attached device if the appropriate INF file can not be found in the hard drive.

U.S. Patent 5,655,148 discloses a computer retrieving configuration data and an INF file from a device.

International Patent Application WO 02/080176 discloses storing an autorun file on a device for automatic launching is enabled.


Japanese Patent Application JP 2003-114799 discloses an autorun function of a CD-ROM drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven G. Snyder whose telephone number is (571) 270-1971. The examiner can normally be reached on Mon. - Thurs. 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.S.

12/10/07

HENRY TSAI
SUPERVISORY PATENT EXAMINER